

(k) *Safe work zone.* The employer shall establish a safe work zone within which employees may not be present when vertically connected containers are in motion.

(1) The safe work zone shall be sufficient to protect employees in the event that a container drops or overturns.

(2) The written transport plan required by paragraph (j)(2) of this section shall include the safe work zone and procedures to ensure that employees are not in this zone when a VTL is in motion.

[48 FR 30909, July 5, 1983, as amended at 62 FR 40200, July 25, 1997; 65 FR 40940, June 30, 2000; 73 FR 75289, Dec. 10, 2008]

**§ 1917.73 Terminal facilities handling menhaden and similar species of fish (see also § 1917.2, definition of hazardous cargo, material, substance or atmosphere).**

(a)(1) Tanks in terminal areas used for receiving or storing bailwater for recirculating into vessel holds in discharging operations shall be opened or ventilated to minimize contamination of water circulated to the vessel. Bailwater tanks shall be thoroughly drained upon completion of each day's operations and shall be left open to the air. Drainage is unnecessary when bailwater has been treated to remove hydrogen sulfide-producing contaminants and the efficiency of such treatment has been established by the employer.

(2) Before employees enter a dock tank, it shall first be drained, rinsed and tested for hydrogen sulfide and oxygen deficiency. Employees shall not enter the tank when the hydrogen sulfide level exceeds 20 ppm or oxygen content is less than 19.5 percent, except in emergencies.

(3) Tests shall be conducted by designated personnel with suitable test equipment and respiratory protective equipment complying with the provisions of § 1910.134 of this chapter.

(b) Pipelines and hoses on the dock or terminal used for receiving and circulating used bailwater shall be completely drained upon completion of each day's operation and left open to the air.

(c) At least four units of respiratory protective equipment consisting of sup-

plied-air respirators or self-contained breathing apparatus complying with the requirements of § 1910.134 of this chapter shall be available in a suitably labeled cabinet for immediate use in case of emergency caused by oxygen deficiency or hydrogen sulfide. Any employee entering a tank in an emergency shall, in addition to respiratory protective equipment, wear a lifeline and safety harness to facilitate rescue. At least two other employees, similarly equipped, shall be continuously stationed outside the tank to observe and to provide rescue services.

(d) The plant superintendent and foremen shall be trained and knowledgeable about the hazards of hydrogen sulfide and oxygen deficiency. They shall be trained in the use of appropriate respiratory and other protective equipment, and in rescue procedures. Other supervisory plant personnel shall be informed of these hazards and instructed in the necessary safety measures, including use of respiratory and rescue equipment.

(e) Supervisory personnel shall be on hand at dockside to supervise discharging of bailwater from vessels.

[48 FR 30909, July 5, 1983, as amended at 65 FR 40940, June 30, 2000]

**Subpart E—Personal Protection**

**§ 1917.91 Eye and face protection.**

(a)(1)(i) The employer shall ensure that each affected employee uses protective eye and face protection devices that comply with any of the following consensus standards:

(A) ANSI Z87.1–2003, “American National Standard Practice for Occupational and Educational Eye and Face Protection,” which is incorporated by reference in § 1917.3;

(B) ANSI Z87.1–1989 (R–1998), “American National Standard Practice for Occupational and Educational Eye and Face Protection,” which is incorporated by reference in § 1917.3; or

(C) ANSI Z87.1–1989, “American National Standard Practice for Occupational and Educational Eye and Face Protection,” which is incorporated by reference in § 1917.3.

(ii) Protective eye and face protection devices that the employer demonstrates are at least as effective as

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protective eye and face protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

(2) For employees wearing corrective spectacles, eye protection equipment required by paragraph (a)(1) of this section must be of a type which can be worn over spectacles. Prescription ground safety lenses may be substituted if they provide equivalent protection.

(3) For additional requirements covering eye protection against radiant energy, see § 1917.152(h).

(b) Eye protection equipment shall be maintained in good condition.

(c) Used eye protection equipment shall be cleaned and disinfected before reissuance to another employee.

[48 FR 30909, July 5, 1983, as amended at 62 FR 40201, July 25, 1997; 74 FR 46359, Sept. 9, 2009]

## § 1917.92 Respiratory protection.

(See § 1917.1(a)(2)(x)).

[65 FR 40941, June 30, 2000]

## § 1917.93 Head protection.

(a) The employer shall ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects.

(b)(1) The employer must ensure that head protection complies with any of the following consensus standards:

(i) ANSI Z89.1-2003, "American National Standard for Industrial Head Protection," which is incorporated by reference in § 1917.3;

(ii) ANSI Z89.1-1997, "American National Standard for Industrial Head Protection," which is incorporated by reference in § 1917.3; or

(iii) ANSI Z89.1-1986, "American National Standard for Personnel Protection—Protective Headwear for Industrial Workers—Requirements," which is incorporated by reference in § 1917.3.

(2) Head protection devices that the employer demonstrates are at least as effective as head protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compli-

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ance with the requirements of this section.

(c) Protective hats previously worn shall be cleaned and disinfected before issuance by the employer to another employee.

[48 FR 30909, July 5, 1983, as amended at 62 FR 40201, July 25, 1997; 74 FR 46359, Sept. 9, 2009]

## § 1917.94 Foot protection.

(a) The employer shall ensure that each affected employee wears protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects or objects piercing the sole.

(b)(1) The employer must ensure that protective footwear complies with any of the following consensus standards:

(i) ASTM F-2412-2005, "Standard Test Methods for Foot Protection," and ASTM F-2413-2005, "Standard Specification for Performance Requirements for Protective Footwear," which are incorporated by reference in § 1917.3;

(ii) ANSI Z41-1999, "American National Standard for Personal Protection—Protective Footwear," which is incorporated by reference in § 1917.3; or

(iii) ANSI Z41-1991, "American National Standard for Personal Protection—Protective Footwear," which is incorporated by reference in § 1917.3.

(2) Protective footwear that the employer demonstrates is at least as effective as protective footwear that is constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section.

[62 FR 40201, July 25, 1997, as amended at 74 FR 46359, Sept. 9, 2009]

## § 1917.95 Other protective measures.

(a) *Protective clothing.* (1) Employees performing work that requires special protective clothing shall be directed by the employer to wear the necessary special protective clothing.

(2) When necessary, protective clothing previously worn shall be cleaned and disinfected before reissuance.

(b) *Personal flotation devices (PFDs).* (1) The employer shall provide, and shall direct the wearing of PFDs for those employees, such as line handlers, who are engaged in work in which they may be pulled into the water: